

we might almost say a severely judicial—view of Mary's character, and his hatred of sentimental or censorious partisanship for or against her appears again in his striking prose essay on the character of "Mary Stuart." In one passage her custodian, Sir Drew Drury, is made to speak of her in a passage of which these are the concluding lines:—

"She shall be a world's wonder for all time,
A deadly glory, watched of marvelling men,
Not without praise, not without noble tears,
And if without what she would never have,
Who had it never, pity—yet from none
Quite without reverence, and some kind of love
For that which was so royal."

The same note of admiration for her beauty, bravery, and overpowering charm—an admiration only deepened by his perfect comprehension of her crimes—is maintained by Swinburne throughout the play till the last fatal scene, when "weeping, captivity, and shuddering fear" were "stilled by the ensanguined block of Fotheringay."

V. O. E.

THE COUNTY OF CHESHIRE.

Cheshire seems to me a county which belongs in a few ways both to the North and to the South of England, and yet in other ways it is entirely Northern; it certainly is in climate. In Cheshire we have some flowers abundant in counties further south and which are never found further north. Here, too, is the northern limit for nightingales. The people of the agricultural parts of Cheshire are very different even from their near neighbours in Lancashire; only on the shores of Pickmere does one hear the clipped, burry tongue of the North.

I know but a few parts of Cheshire really well, but what I know has served to make me realise how easily the county

may be divided into hillside, plain, and coastlands. The hills of Cheshire are principally in the east upon the Derbyshire border, and where the "teapot handle" runs up between Lancashire and Derbyshire; there are high lands, too, near Congleton and in Delamere Forest.

The Plain of Cheshire includes all the rest except the Wirral Peninsula. On one who, like myself, has always lived among hills the plain of Cheshire has at first a most depressing influence, but the love of the land soon begins.

Mr. Arnold Forster might well have taken the county as an example for that chapter in "This World of Ours" which shows how the physical features influence the political geography of any district.

The most thickly populated part of Cheshire is the north-east corner, where coal is easily obtained and where the Millstone Grit hills provide cheap water power. The cotton industry of Lancashire spreads into this corner. A little further south along the border the hills are left in peace for the sake of the grouse moors and the water gathered thereon which helps to supply Manchester and several Cheshire towns. These hills closely resemble the hills of south-east Lancashire, but they are much richer in birds, beasts, and flowers.

The best agricultural lands of the plain consist of the stretch of land covered by the Keuper Marls (in places 3,000 feet thick), and the farmers owe their prosperous circumstances almost entirely to these marls. It is very easy land to plough; it is level, and the soil is not really heavy, whilst the rock is very well covered. In a circle of a seven-mile radius around my post at Mere I do not know of a solitary rock at the surface or in a cutting; the nearest approaches to rocks are some scattered glacial boulders of Welsh origin. The lower beds of the Keuper series are soft sandstones (grey, green, red, and variegated in colour), and above these is what the farmers know as "marl," it being a kind of clay which works into the loam very well. In almost every

The "pits" are now in most field one finds a "marl-pit." The "pits" are now in most cases small ponds, but they were made by the gangs of "marlers" who went from farm to farm digging out the marl for the farmers, who spread it over their fields as a manure. When pits have been dug close together, a dyke separates them, which is called a "mid-feather," and as these are necessarily left uncultivated and are too narrow for cattle to graze upon, the "mid-feathers" are happy hunting-grounds for those of a botanical turn of mind. When digging is carried to any depth the clayey sides store up the rainwater until the pit is full; the stagnant water is generally used for watering the cattle, and seems to have only a good effect on them! Cheshire supplies Manchester, Liverpool, and many other Lancashire towns with dairy produce and vegetables, and the Staffordshire towns depend on her, too. Northwich, Middlewich, and Winsford are towns occupied largely with the salt trade; the rock-salt is mined and the brine extracted until the crust of the earth is so hollow that there are continual subsidences, and one rarely sees a house in Northwich, at any rate, which is "in the plumb." Nantwich has now given up the actual salt trade, though the brine wells are used for curative purposes. The brine wells of Cheshire have been worked since the time of the Romans, "wych" is a Saxon word meaning salt work, and, according to the Domesday Book, the "wychs" were given to various Normans, who paid toll to the Crown for all salt taken for other than their own use. The rock-salt vein was not discovered until the year 1670. It was first found near Marbury. The pure salt trade has had to take a second place latterly in favour of the trade in alkali and other chemical products of the marls. These products are largely exported from Runcorn, on the Mersey estuary.

Around Hanover in the last ten years much "kali" has been taken out of the ground and exported as a new manure. I wonder if this is the same as the Cheshire "marl," and if "alkali" and "kali" are connected? Asparagus, kohl-

rabi, mangels, strawberries, and CALVES certainly reach a marvellously high standard of growth in and on ground treated with either marl or "kali."

One great drawback to the plain of Cheshire is, in my opinion, the absence of water. I do not mean to say that there is a lack of moisture in the air or in the ground; there is plenty of rain, and a large number of meres and patches of more or less stagnant water. But one rarely sees a running stream until one comes to the edge of the marl lands. Drinking water is often a difficulty, as, after wells have been long in existence (say ten years), they begin to fill with brine. The "flashes" (word said to be derived from "flaque," French) or "bottom flashes," which are like flooded fields, are another result of the subsidences of the ground from under which the brine has been taken. The ground subsides and the stretch of lowland fills with water. There are new ones constantly forming, and the old ones, such as Witton Brook, are enlarging steadily.

The Cheshire meres are thought by some to have been formed in the same way, but by subsidences due to natural causes; they are not as a rule deep either; the deepest, Rostherne Mere, has a maximum depth of 100 feet. Rostherne Mere rivals our lakes in beauty. It lies low, and on the steep banks the woods are alternated with bright green fields, the woods are edged with marshy ground and a thick belt of reeds, which are a splendid haven for reed warblers and water-birds of all kinds. On the south bank overlooking the mere stands the old square-towered church, which is built in red sandstone, like Chester Cathedral, and so adds yet another touch of colour to a view already rich in wonderful hues. A sunset seen across Rostherne Mere is one of the most beautiful things I have ever seen, and Cheshire affords excellent opportunities for seeing sunsets, as Turner seems to have found when he stayed at Tabley. It is an interesting fact that smelts (salt-water fish) were naturalised in Rostherne Mere in the eighteenth century,

and shoals are still found there. There is an appropriate legend concerning the mere. When the workmen were hanging Rostherne Church bells one bell persisted in rolling down the slope to the mere as if possessed; a workman cursed it in anger, and the bell rolled down again and sank beneath the water. Since then every Easter Eve a mermaid comes up from the Irish Sea by a subterranean passage and rings the bell at the water's surface and at the bottom of the mere.

Pickmere is quite a contrast to Rostherne Mere, as the shores are low and there is arable land nearly all round. The mere is a handy fishing resort for Warrington and Northwich, and the fishermen say they catch "Awull sooarts o' cooarse fish," but no angler appears to have found any sort but bream!

The fishermen of Pickmere have always been looked upon as the hardest of Cheshire folk, and have stood a siege in their boats (only a generation ago) because Lord Tabley's agent did not understand or agree with their fishing rights. The event is known as the Battle of Pickmere. The stubbornness and hardihood of Cheshire folk is thought to be due to the resistance necessary in olden times against the inroads of the Welsh; in this way they are distinctly Northerners.

OLIVE THORP.

BRAN TUB.

A good adhesive for leather and wood: One part rosin or resin and two parts beeswax, melted together and used whilst very hot.

To grow leaves all over a carrot: Scoop out the inside of the thick end of a carrot, leaving thick enough walls to hold water. Make holes to insert string near the top, hang it near a sunny window, and *keep it filled with water*. The pretty leaves will then grow up all round and hide the carrot.

LIST OF PLANTS REQUIRED IN SCALE HOW BOTANICAL GARDENS.

(Second Instalment.)

Gentianaceæ.—*Chlora perfoliata* (yellow wort), *Erythræa latifolia* (broad-leaved centaury), *Erythræa littoralis* (linear centaury), *Cicendia pusilla* (dwarf cicendia), *Gentiana Pneumonanthe* (marsh gentian), *G. Amarella* (autumn gentian), *G. campestris* (field gentian), *G. cruciata*, *G. lutea*, *Menyanthes trifolia* (Buckbean), *Limnanthemum nymphæoides* (common Limnanth).

Umbelliferae.—*Fœniculum vulgare* (common fennel), *Ligusticum pyrenaicum*, *Silauus pratensis* (pepper saxifrage), *Meum athamanticum* (bald money), *Crithmum maritimum* (samphire), *Tordylium maximum* (Great hartwort), *Scandix pecten* (shepherd's needle), *Daucus carota* (common carrot), *Coriandrum sativum* (coriander), *Zizia*.

Caprifoliaceæ.—*Lonicera Xylosteum* (fly honeysuckle).

Rubiaceæ.—*Rubia peregrina* (climbing madder).

Valerianeæ.—*Valerianella olitoria*.

Dipsaceæ.—Mourning widow.

Compositæ.—*Aster tripolium* (sea aster), *nula dysenterica* (fleabane), *Diotis candidissima*, *Anthemis austriaca* (mayweed), *Chrysanthemum segetum* (corn marigold), Everlasting *Gnaphalium* (probably same as *Antennaria dioica* = Mt: everlasting), *Inula Helenium* (elecampane), *Artemisia* (southernwood).

Lentibuliaceæ.—*Utricularia minor* (lesser Bladderwort).

Polemoniaceæ.—*Phlox drummondii*.

Convolvulaceæ.—*Convolvulus soldanella* (sea bindweed).

Boraginaceæ.—*Lithospermum officinale* (common Gromwell), *Lithospermum purpureo* (blue Gromwell), *Symphytum*

officinale (common Comfrey), *Asperugo procumbens* (mad-wort).

Solanaceæ.—*Solanum edulis*.

Orobanchaceæ.—*Orobanche minor* (lesser broomrape).

Scrophularinæ.—*Verbascum Thapsus* (great mullein), *Antirrhinum major* (? snapdragon), Monkey plant.

Labiataæ.—*Mentha piperita* (pepper mint), *Calamintha Clinopodium* (wild Basil), *Nepeta Cataria* (cat mint), *Melissa officinalis* (= *Melittis melissophyllum*?, balm?), *Stachys sylvatica* (hedge woundwort), *Ballota hispanica* (*B. nigra*?, Benth :) (black horehound), *Leonurus Cardiaca* (mother wort), *Monarda fistulosa*.

Verbenaceæ.—*Verbenæ renosa* (?).

Plumbaginæ.—*Statice Limonium* (sea lavender), *S. auriculæfolia* (rock sea lavender), *S. reticulata* (matted sea lavender).

Plantaginæ.—*Plantago lanceolata* (Ribwort Plantain), *P. maritima* (sea plantain), *P. Coronopus* (Buck's horn plantain), Lamb's tongue ribwort.

Hydrophyllæ.—*Nemophila nusiua* (?).

Illebraceæ.—*Herniaria glabra* (common rupture wort), *Paronychia argentia* (?).

Amaranthaceæ.—*Amaranthus candatus*, *Gomphrena decumbens*.

Chenopodiaceæ.—*Chenopodium vulvaria* (stinking goose-foot), *Ch. urbicum* (upright goosefoot), *Ch. glaucum* (glaucous goosefoot), *Salicornia herbacea* (glasswort).

Polygonaceæ.—*Rumex conglomeratus* (clustered dock), *R. sanguineus* (red-veined dock), *R. crispus* (curled dock), *R. Hydrolapathum* (great water dock).

Thymeleaceæ.—*Daphne mezereum* (mezereon), *D. Cneorum*, *D. Geukwa* (?).

Euphorbiaceæ.—*Euphorbia peplis* (purple spurge), *E. Helioscopia* (sun spurge), *E. Lathyris* (Caper spurge), *E.*

Segetalis (portland spurge), *E. Amygdaloides* (wood spurge), *E. Paralias* (sea spurge), *Mercurialis annua* (annual mercury).

Empetraceæ.—*Empetrum nigrum* (crowberry).

Urticaceæ.—*Ricinus communis* (castor oil plant).

Typhaceæ.—*Sparganium ramosum* (bur reed, cradle rush).

Aroideæ.—Spotted arum, *Arum italicum* (Italian arum).

Naiadeæ.—*Triglochin maritimum* (sea arrow grass).

Orchidaceæ.—*Neottia nidus-avis* (bird's nest orchis), *Spiranthes autumnalis* (common lady's tresses), *Orchis morio* (green-winged orchis), *Habenaria bifolia* (butterfly orchis), *Aceras anthropophora* (man orchis), *Herminium monorchis* (musk orchis), *Ophrys apifera* (bee orchis), *Ophrys aranifera* (spider orchis), *Ophrys muscifera* (fly orchis).

Commelineæ.—*Nadercantia virginia* (blue and white varieties).

Amaryllideæ.—*Narcissus biflorus* (primrose peerless), *N. bulbocodium*, *N. tazetta*, *N. juncifolius*, *Alstræmeria*.

Trillideæ.—*Trillium grandiflorum*.

Liliaceæ.—*Ornithogalum umbellatum* (Star of Bethlehem), *Colchicum autumnale* (meadow saffron), *Tofieldia palustris* (Scottish asphodel), *Lilium giganteum* (giant lily), *Lilium auratum* (golden lily), *S. Bernard lily*, *Juno lily*, *Orange lily*, *Day lily*, *White Hellebore*, *King's Rod*.

Juncaceæ.—*Juncus trifidus* (Highland rush), *J. squarrosus* (heath rush), *J. compresses* (round fruited rush), *J. balticus* (Baltic rush), *J. glaucus* (hard rush), *J. acutis* (sharp rush), *J. triglumis* (three-flowered rush), *J. effusus*, *J. conglomeratus*, *J. obtusiflorus* (obtuse rush), *J. erecta* (upright wood-rush).

Cyperaceæ.—*Scirpus setaceus* (bristle sedge), *Carex paniculata* (panicled sedge), *Carex curta* (whitish sedge, *C. canescens* Benth:), *Carex pseudocyperus* (Cyperus-like sedge), *Eleocharis multicaulis*; any other uncommon sedges.

Graminæ.—*Phalaris canariensis* (canary grass), *Alopecurus pratensis* (meadow foxtail), *Milium effusum* (millet).

Filices.—*Ophioglossum vulgatum* (adder's tongue), *Polypodium cambricum* (Welsh Polypody), *Asplenium germanicum* (German spleenwort), *Polypodium Phegopteris calca-*
neum.

Equisetaceæ.—Spores of *equisitum maximum*.